I. INTRODUCTION

- A. Background: Toxic and highly toxic gases are regulated by Article 74 and Article 80 of the Los Angeles County Fire Code. These gases, if released into the atmosphere, could pose a dangerous threat to the public. Therefore, this Department shall enforce the provisions of the Fire Code that regulate toxic and highly toxic gases for existing facilities, as well as new installations.
- B. Scope: This regulation shall apply to all individuals, companies or corporations that use toxic or highly toxic compressed gases.
- C. Author: The Deputy Chief of the Prevention Services Bureau, through the Assistant Fire Chief (Fire Marshal) of the Fire Prevention Division, is responsible for the content, revision, and periodic review of this regulation.
- D. Authority:
 - 1. Health and Safety Code, State of California
 - 2. County of Los Angeles Fire Code

II. RESPONSIBILITY

A. All personnel shall familiarize themselves with this regulation so that they may inform the public and enforce the Fire Code. Copies of this regulation shall be made available to the public when requested.

III. POLICY

A. This Department will require control or containment of toxic and highly toxic compressed gases in accordance with the 2002 County of Los Angeles Fire Code, when a potential release of toxic or highly toxic gas would pose a threat to the public.

IV. PROCEDURES

- A. Permits: A permit is required to store, use, handle, transport on-site or dispense any toxic and/or highly toxic compressed gases of any amount, per section 105c.7 Compressed Gases and section 105h.1 Hazardous Materials of the Fire Code.
- B. General Requirements: All occupancies that store, use, handle, or dispense compressed toxic or highly toxic gases that exceed the exempt amounts from Fire Code Table 8001.15B shall be required to comply with the 2002 County of Los Angeles Fire Code Articles 74 and 80.

C. Compliance Procedures:

- 1. During the annual fire prevention inspection, any occupancy that is found to have toxic or highly toxic compressed gas in use or storage is required to have a permit per Fire Code Section 105.
- 2. If the occupant does not have a permit issued by the Department, serve the occupant with an Official Inspection Report and require that a permit application be received by the Fire Prevention Division Petroleum Chemical Unit Inspector that has jurisdiction. Additional violations should be recorded and handled in accordance with Procedure #4.
- 3. The inspection report and a copy of this regulation should then be given to the occupant. Compliance should be within 21 days, or a time period depending upon the existing hazard and danger.
- 4. A copy of the inspection report is to be forwarded to the Petroleum Chemical Unit. This unit will be responsible for issuing the permit and then returning a completed copy to the jurisdictional Fire Station, Special Units I Section or the Regional Fire Prevention Office for maintenance. If there is no compliance, the Petroleum Chemical Inspector shall issue a second notice to the applicant at the end of the 21 days.
- 5. The Petroleum Chemical Unit Inspector shall proceed, if necessary, as required for noncompliance after the second notice is issued. Follow Procedure 1 and request assistance from the District Attorney's office. The Fire Marshal is authorized to order an operation or usage stop or the evacuation of any premises or building, which has or is a condition hazardous to life and property.

- 6. The Petroleum Chemical Unit may allow up to one year for full compliance if a schedule for compliance is submitted with the permit application. The occupant must also contact the Los Angeles County Fire Health Haz Mat Division for disclosure requirements and procedures.
- D. Toxic and Highly Toxic Gases:

The following is a list of commonly used Toxic and Highly Toxic gases by industry today. This list is a guide and is not all inclusive. Always review the Material Safety Data Sheet.

Ammonia Nitric Oxide

Arsenic pentafluoride Oxygen difluoride

Arsine Phosgene
Bromine Phosphine

Boron trifluoride Phosphorus pentafluoride

Carbon monixide Selenium hexafluoride

Diazomethane Silicon Tetrafluoride

Diborane Stibine

Fluorine Sulfur Tetrafluoride

Hydrogen Oxanide Methyl Mercaptan

E. Special requirements for Highly Toxic and Toxic compressed gases:

In addition to the general requirements in the Los Angeles County Fire Code Section 8003.3 for Toxic and Highly Toxic compressed gases, the following are Special Amendment Requirements for Highly Toxic and Toxic compressed gases as per Los Angeles County Fire Code Section 8004.2.3.7.

- Ventilation and Storage arrangement: Compressed gas cylinders shall be within gas cabinets, exhausted enclosures or gas rooms. Portable or stationary tanks shall be within gas rooms or exhausted enclosures.
- 2. Gas cabinets: Gas cabinets shall be in accordance with Section Gas cabinets shall be internally sprinklered. The number of cylinders contained in a single gas cabinet shall not exceed three.

- 3. Exhausted enclosures: Exhausted enclosures shall be in accordance with Section 8003.3.1.3.3. Exhausted enclosures shall be internally sprinklered.
- 4. Gas rooms: Gas rooms shall be in accordance with Sections 8003.1.3.4 and 8003.3.1.5. Gas rooms shall be internally sprinklered.
- 5. Treatment systems/Smoke detection: Treatment systems and smoke detection systems shall be provided in accordance with Section 8003.3.1.3.5. and Section 8003.3.1.7 respectively.
- 6. Gas detection: Gas detection shall be provided in accordance with Section 8003.1.6. Activation of the monitoring system shall automatically close the shutoff valve on highly toxic or toxic gas supply lines related to the system being monitored.
- 7. Process equipment: Effluent from process equipment containing highly toxic or toxic gases which could be discharged to the atmosphere shall be processed through an exhaust scrubber or other processing system. Such systems shall be in accordance with the Mechanical Code as required for product-conveying ventilation systems.
- 8. Outdoor Dispensing and Use: With the exception of application of pesticide products registered with the United States Environmental Protection Agency, the location of outdoor dispensing and use areas shall be located as required for outdoor storage in accordance with Section 8003.